AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-9 (Canceled)

Claim 10 (Original): A system for scanning a target portion of a predefined search area, said system comprising:

a sensor for scanning a first part of the predefined search area from a starting point; and

a device for analyzing output from said sensor and determining a destination point within the predefined search area for said sensor,

said sensor scanning a second part of the predefined search area from the destination point, the first part and the second part together comprising a part of the predefined search area at least as large as the target portion of the predefined search area.

Claim 11 (Original): The system as set forth in claim
10 wherein said device is a computer.

Claims 12-18 (Canceled)

Claim 19 (New): The system as set forth in claim 10 wherein said device partitions the predefined search area into cells, said device determining a starting cell for the sensor.

Claim 20 (New): The system as set forth in claim 19 wherein said device initiates a scan of a number of the cells from the starting cell, said sensor determining the content of each of the number of cells.

Claim 21 (New): The system as set forth in claim 20 wherein said device determines a total cost for said sensor to travel to each of the scanned cells, said sensor performing a scan from each of the scanned cells.

Claim 22 (New): The system as set forth in claim 21 wherein said device determines a next scan cell with a minimum cost.

Claim 23 (New): The system as set forth in claim 22 wherein said device redesignates the next scan cell as the starting cell.